



Navy Environmental Health Center  
*Ensuring Navy and Marine Corps readiness  
through leadership  
in prevention of disease and promotion of health*

# Sexual Health and Responsibility Program (SHARP)



## Condom Availability in the US Navy and Marine Corps A Discussion Paper

January 2002

Navy Environmental Health Center  
Directorate of Health Promotion and Population Health  
Sexual Health and Responsibility Program (SHARP)  
620 John Paul Jones Circle  
Portsmouth VA 23708  
(757) 953-0974 [DSN 377]  
[www-nehc.med.navy.mil/hp/sharp](http://www-nehc.med.navy.mil/hp/sharp)

## **Foreword**

This document is useful when communicating condom-use and condom access with leaders. The document emphasizes that although either abstinence from sexual intercourse or sexual activity within a mutually monogamous relationship is the most effective means of preventing sexually transmitted diseases, proper use of latex condoms can reduce the risk of contracting STDs among individuals who are sexually active but not in a monogamous relationship, and that increasing the availability of condoms is an important component of a comprehensive prevention strategy that supports STD/HIV and unplanned pregnancy prevention efforts. It's also available for downloading from the SHARP website.

This document supercedes the previous version dated 31 March 2000.

Comments on this document are encouraged and can be forwarded to the SHARP Program Manager at:

Navy Environmental Health Center  
Directorate of Health Promotion and Population Health  
Sexual Health and Responsibility Program (SHARP)  
2510 Walmer Ave  
Norfolk VA 23513-2617  
Internet: [www-nehc.med.navy.mil/hp/sharp](http://www-nehc.med.navy.mil/hp/sharp)  
voice: (757) 462-5566; DSN 253-5566

**Views and opinions expressed are not necessarily those of the Department of the Navy**

# CONDOM AVAILABILITY IN THE US NAVY AND MARINE CORPS

## EXECUTIVE SUMMARY

Although either abstinence from sexual intercourse or sexual activity within a mutually monogamous relationship is the most effective means of preventing sexually transmitted diseases, proper use of latex condoms can reduce the risk of contracting STDs among individuals who are sexually active but not in a monogamous relationship. Sexually Transmitted Diseases, including HIV are a major public health threat. U.S. and foreign military personnel are a population group at special risk of exposure to sexually transmitted diseases. The young, unattached man is highly susceptible to STDs due to available time, motivation, and influence from peers to indulge in high risk behavior.

The correct and consistent use of latex condoms are highly effective at preventing STDs. According to the DoD Survey of Health Related Behaviors, condom use among sexually active, unmarried personnel at last encounter was 42% for the total DoD, with 44%, 39%, 42% and 40%, for Army, Navy, Marine Corps, and Air Force, respectively. Scientific evidence has proven that condom distribution programs do not hasten the onset of sexual intercourse, nor increase sexual activity. Conversely, increasing access to condoms could lead to increased condom use among sexually active personnel which may result in decreasing incidence of STDs including HIV and unplanned pregnancy. This supports our military strategic goal for a “fit and ready force in peacetime and in conflict.”

Increasing the availability of condoms is an important component of a comprehensive prevention strategy that supports STD/HIV and unplanned pregnancy prevention efforts. Additionally, condom key rings, as designed by the Navy Environmental Health Center’s Sexual Health and Responsibility Program (SHARP), provide a receptacle that maintains the quality of the condoms, are discrete, provide a mechanism to the individual to have them on hand if needed, and refer users to a web site that promotes sexual responsibility.

## INTRODUCTION

Sex is a normal human function that can involve the expression of love and emotional feelings. Sexual intercourse, however, is not without potential harmful or unintended consequences. Two major potential health consequences of sexual intercourse are unintentional pregnancy and sexually transmitted diseases (STDs).

Sexually Transmitted Diseases including the Human Immunodeficiency Virus (HIV) are a major public health threat. The U.S. has the highest rates of STDs in the industrialized world, with rates that are 50-100 times higher than other industrialized nations (Eng and Butler, 1997). The World Health Organization (WHO) estimates that globally, an estimated 333 million new cases of curable STDs occur each year among adults (WHO, 1996).

A panel convened by the American Social Health Association (1998) for the Kaiser Family Foundation estimated that in 1996, 15.3 million new cases of sexually transmitted disease occurred in the United States. This report states that STDs are among the most common

infections in the United States. Of the top ten infections, half (five) of them are sexually transmitted. Further, this panel estimates that the direct medical costs of STD treatment for all estimated U.S. cases to be at least \$8.4 billion per year. Syphilis alone, with rates at historic lows and eradication efforts underway, has direct and indirect costs estimated at \$966 million annually (CDC 1999b).

## **STDS AND THE MILITARY**

Military personnel are exposed to STDs within the continental United States (CONUS) and outside the continental United States (OCONUS). STD incidence is higher CONUS due to the fact that most military personnel spend most of their time in CONUS. Furthermore it appears that risk is also higher in CONUS and is expected to remain this way (R.A. Shaffer, personal communication, November 2, 1999). Navy surveillance data indicate a high percentage of reported STDs acquired CONUS compared to OCONUS. For example, the Atlantic fleet reported 97% of STDs were acquired CONUS (Schibly, 1998).

HIV-1 has been classified into 10 genetic subtypes (Kalichman, 1998) with subtype B, which is predominately found in North America and Europe, predominant among HIV infected service members (Brown, Newby, Ray, Jackson, & Burke, 1996; Brodine et al, 1995). Analysis of risk of HIV infection to Naval personnel following a visit to a foreign port with high endemicity of HIV was generally low (Garland et al, 1991). HIV seroconversion rates among Sailors are higher among those stationed in areas with higher HIV rates among their civilian counterparts (Garland et al, 1993).

Although risk of exposure and acquisition of STDs among servicemen seem highest within CONUS, American Sailors and Marines are also at significant risk for STDs while deployed overseas. A 1995 study of HIV-1 genetic subtypes among infected servicemen indicated that at least some HIV infections were acquired outside the U.S. Additionally, four of five servicemen infected with non-B HIV subtypes reported sex with prostitutes in overseas ports (Brodine et al., 1995). A 1991 study of self-reported behavior among 1744 shipboard male Sailors and Marines during a six-month deployment found “high levels of risk behavior for the transmission of STDs” including an overall prostitute contact rate of 42%, and a “new STD” infection rate of 10% (Malone et. al., 1993). Another 1992 study of 2072 male shipboard Sailors and Marines found an overall prostitute contact rate of 42% during all previous overseas deployments. This study also reported an increased risk of infection with hepatitis B among members with a history of short deployments to the South Pacific region (9.8% positive for anti-HBc) and among members with a history of longer duty in the Mediterranean and South Pacific (19.4% and 17.3% positive, respectively) (Hawkins et al, 1992).

In a ten year report on reportable communicable diseases (not all STDs are reportable) for active duty Navy and Marine Corps personnel (Navy Environmental Health Center, 1999a) syphilis, chlamydia and gonorrhea are in the top ten categories for the most commonly reported communicable diseases by both frequency and incidence. These diseases rank second, sixth, and tenth, respectively, for the Navy and second, third and tenth, respectively, for the Marine Corps. It is interesting to note that chlamydia, the most common STD in the U.S., was only reportable from 1997, the last year accounted for in the ten year summary. In just one year of data, its frequency and incidence has propelled it to sixth and third overall for a decades worth of frequency data.

In a 1985 policy memorandum, the Department of Defense (DoD) began testing all active duty military personnel for HIV. This same policy required procedures to report communicable diseases, including HIV. There have been 4,514 documented cases of HIV infection among U.S. Navy and Marine Corps active duty personnel identified since testing began, up through January 1, 1999 (Navy Environmental Health Center, 1999b). Analysis of demographic information of seropositive Naval personnel indicate over the course of testing, the predominately infected groups tends to be; minority, enlisted, and males in their 20's (Calvert, 1998; Garland, Gorham, Miller, Hickey, & Balaza, 1990).

The 1998 Department of Defense (DoD) Survey of Health Related Behaviors Among Military Personnel (Bray et al., 1999) is the seventh in a series of surveys of active-duty military personnel. The eligible population for the 1998 survey consisted of all active-duty military personnel except recruits, Service academy students, persons absent without official leave, and persons who had a permanent change of station at the time of data collection. The 1998 DoD survey indicates self reported prevalence of STD, while low, are higher in the Navy than the other services. Condom use at last sexual encounter among sexually active unmarried personnel was 42% for the total DoD, with 44%, 39%, 42% and 40%, for Army, Navy, Marine Corps, and Air Force, respectively. Condom use was lowest for Navy personnel and lower for enlisted personnel when compared to officers for all services. Further, more than half of all military personnel who had one or more casual partner used condoms inconsistently if they used them at all. These rates are lower than Healthy People 2000 and 2010 objective of 50% (National Center for Health Statistics, 1999). The U.S. military should strive to exceed this objective to counter our high STD and unplanned pregnancy rates where in 1996, almost two-thirds of the pregnancies among enlisted women were unplanned (Thomas & Uriell, 1998).

The 1995 Department of Defense (DoD) Survey of Health Related Behaviors Among Military Personnel (Bray et al., 1995) indicates a high level of knowledge regarding HIV transmission. However, there remains a “disconnect” between what service personnel know and the risky behavior they engaged in (inconsistent to no condom use).

A 1999 HIV needs assessment of military active duty personnel (Center for Health Policy Studies, 2000), found that unprotected sex on deployment was identified as a potential problem among 64%, 77%, 75%, and 59% of the Army, Navy, Marine Corps, and Air Force respondents, respectively. Unprotected sex after deployment was identified as a potential problem for 71%, 74%, 75%, and 53% of the Army, Navy, Marine Corps, and Air Force respondents, respectively. Noteworthy was the 13% of male Marines in the rank of E-1 through E-4 who reported their perception of being at **very high or high risk** for infection with HIV with 5%, 6% and 2% for the Army, Navy and Air Force counterparts, respectively.

According to the Navy Environmental Health Center (1999c), HIV disease is a threat to readiness. Even though new recruits can be found to replace HIV infected service members, readiness and smooth teamwork are compromised if people who have not served together previously fill vacant billets. Preparedness is also hampered if highly skilled and experienced personnel are lost due to HIV disease. HIV disease is of particular concern to the military since it tends to disproportionately affect young adults and costs have increased for the recruitment and training of replacements. The US Navy has identified over 4,500 active duty personnel infected with HIV, most of who have been medically retired. It costs approximately \$40,000 to recruit

and train each of these individuals, equating to \$180 million of avoidable lost dollars. The additional cost to recruit and train their replacements would double this amount to \$360 million.

### **SUPPORT TO INCREASE CONDOM AVAILABILITY AND ACCESSIBILITY**

Condom availability is an emotionally and politically charged issue. The issue of condom availability promoting sexual activity has long been an identified concern. There is no evidence, however, that condom availability or promotion programs increase sexual activity (Kirby, 1994). Condom availability has been shown to reduce STDs and pregnancy among adolescents (Wolk and Rosenbaum, 1995) and in some case to even decrease sexual activity (Seller et al., 1994).

The 1995 and the 1998 Department of Defense (DoD) Survey of Health Related Behaviors Among Military Personnel (Bray et al., 1995 & 1999) continue to recommend two areas for future STD prevention health education endeavors; (1) increasing condom use among sexually active, unmarried personnel to meet Healthy People 2010 objectives, and (2) identifying effective ways to encourage high-risk personnel to reduce their risk of STD infection by decreasing their number of sexual partners, consistent use of condoms, or both.

Three components have been identified as strategies for the prevention of sexual transmission of HIV (Cohen, Dallagetta, Laga & Holmes, 1997). They include (1) increasing the use of condoms, (2) decreasing the frequency of unsafe sexual behavior (decreasing number of partners and/or number of sexual encounters), and, (3) controlling STDs which facilitate the transmission of HIV. Considering these three components, prevention strategies for all STDs would include the first two components since the prevention of HIV transmission is closely related to the prevention of other STDs. For those individuals who choose to engage in sexual activity, increasing condom usage appears to be the best prevention strategy.

The CDC (1988) has stated that “Prevention is the most effective strategy for controlling the spread of infectious diseases.” In their recommendations they identified abstinence and a mutually monogamous relationship with an uninfected partner as the only totally effective prevention strategies. However, for sexual relations with an individual whose STD/HIV status is unknown, the correct and consistent use of latex condoms are highly effective at preventing STDs and condom usage therefore is recommended (CDC, 1993; Roper, Peterson & Curran, 1993). Several studies that have followed “discordant” partners (one partner is infected and the other is not) show that consistent condom use significantly reduces the transmission of STDs including HIV infection. Failure to use a condom correctly and consistently, rather than potential defects of the condom itself, is considered to be the major barrier to condom effectiveness.

Condoms can be expected to provide different levels of risk reduction for different STDs. There is no one definitive study about condom effectiveness for all STDs. Several studies have demonstrated that condoms can protect against the transmission of chlamydia, gonorrhea, and trichomoniasis, and may protect against herpes and syphilis. However, because not all studies have demonstrated protective effects, the body of evidence is considered inconclusive. In addition, definitive data are lacking regarding the degree of risk reduction that latex condoms provide in preventing transmission of chancroid and genital Humanpapilloma Virus. It is important to note that the lack of data about the level of condom effectiveness indicates that more research is needed – not that latex condoms don’t work (STD Advisor, 2001).

Worldwide, social marketing of condoms is a key strategy for controlling STDs (Mertens, et al., 1994). Promotion of condom use in particular will continue to be a central strategy for preventing STDs (Eng and Butler, 1997). Cost as a barrier to condom use is also an important issue. A study conducted in Louisiana, a State which initiated a statewide condom social marketing campaign that involved free condom distribution, concluded that cost is a barrier to condom use and that free condoms should be distributed to encourage their use by persons at risk for STDs and HIV (Cohen, Scribner, Bedimo, and Farley, 1999).

## **DEPARTMENT OF DEFENSE STD/HIV PREVENTION INITIATIVES**

The Department of Defense Sexually Transmitted Disease Prevention Committee (STDPC), under the auspices of the Prevention, Safety and Health Promotion Council (chartered by the Secretary of Defense) has developed a prevention action plan to combat STDs. The STDPC desirable end state goals are to prevent premature mortality resulting from life threatening STDs such as HIV, hepatitis and cancers resulting from STD infection and to prevent morbidity from STDs, to include affects on reproduction and fetal loss. Focus on these end state goals supports the military goal of readiness in peacetime and in conflict. One specified goal in the plan is to increase the accessibility and availability of prevention products including male and female condoms. **This plan has been approved by the Under Secretary of Defense for Personnel and Readiness.**

The Sexual Health and Responsibility Program (SHARP) is a health promotion program within the Navy Environmental Health Center's, Health Promotion and Population Health Directorate. The mission of the Navy Environmental Health Center (NEHC) is to ensure Navy and Marine Corps readiness through leadership in prevention of disease and promotion of health. A main goal of NEHC's Health Promotion and Population Health Directorate is to serve Navy Commands worldwide as subject matter experts and provide program manager support for specific Navy health promotion elements and related prevention initiatives, including sexual health and responsibility.

The SHARP **Mission** is to provide DoN members and family members with health information, education, and behavior change programs for the prevention of sexually transmitted diseases, including HIV, and unplanned pregnancy. Its **Vision** is a DoN cultural norm in which sexual responsibility and safety is encouraged, supported, and expected, and a population in which all pregnancies are planned, Syphilis is eliminated, and other STDs, including HIV are prevented. The SHARP **Goal** is to reduce the occurrence of HIV, STDs and unplanned pregnancy among DoN members beneficiaries to levels specified in the Healthy People 2010 Objectives. To do this, SHARP has developed several **Objectives**:

- Provide information and education programs on the prevention of HIV-STDs.
- Implement programs that promote positive behavior change and responsible decision-making regarding human sexuality.
- Design programs targeting those persons whose behavior puts them at high risk of infection, such as patients in STD clinics, persons referred to drug and alcohol treatment programs, and family planning clinics.
- Provide programs for health-care personnel to assess patients' understanding and risk behaviors and effectively communicate this information to patients.

SHARP programs are comprehensive in nature, providing evidence-based, scientific information to Sailors and Marines to guide them to make responsible sexual behavior choices. Comprehensive messages include abstinence, monogamy, intimate behavior other than intercourse, and barrier protection as choices to eliminate or reduce risk. As a component of this comprehensive message, proper condom use messages are provided to guide those individual's whose choices include sexual intercourse. This message in itself is considered only one component of the total program.

In order to bridge the gap between knowledge and action, condom distribution programs can be developed as a component of a comprehensive prevention program, albeit, a vital component in reducing morbidity. The question is not whether these persons will engage in sex, but whether they will reduce the risk of disease or unplanned pregnancy.

The Center for Naval Education and Training (CNET) has initiated a Sexual Responsibility training requirement for all hands. As part of this training, condoms are recommended for use to prevent STDs and HIV for those who are not abstinent nor in a monogamous relationship.

The United States Marine Corps Semper Paratus's HIV and STD Prevention multimedia training program for Marines discusses a "Battle Plan" for STD/HIV prevention. While abstinence and monogamy are listed as the "safest sexual choices", for those who "choose to have sex", the use of a latex condom "every time" is part of the "Battle Plan" for lowering one's risk. Condoms are referred to as "body armor" and **Marines are encouraged to "carry 'body armor' if you might see action"** and to "use it every time if engaged in sexual activity".

In the Fall of 1999, SHARP purchased 3,000 prototype condom key rings for dissemination to selected sites throughout the Navy and Marine Corps. Of these, 2,000 were developed for Navy use, and 1,000 for Marines. The Navy version features a neutral appearance, the Navy Health Promotion logo, and the SHARP name and web address. The Marine version features a camouflage appearance, a Semper Paratus logo, and the SHARP name and web address. The key rings were selected for various features they offered supporting the prevention of STDs and HIV. First, the container encases three condoms. This encasement offered proper storage and protection of the condoms as opposed to male users who carry condoms in their wallet which does not afford proper protection of condoms and may actually cause deterioration and degradation of a latex condom. Second, the key ring stores three condoms safely. For people who choose to engage in sexual activity, more than one condom may be needed for one encounter. The condom could be torn or cut by handling or slip off during use. In these cases, the condom should be discarded and a new one used. Third, the key ring provides a discreet method to carry condoms which decreases the appearance of "flaunting" and reduces embarrassment which may be encountered by actually carrying condoms alone. Fourth, the key ring container provides the SHARP Website which contains educational information to assist Sailors and Marines to make responsible sexual choices. Response to the condom key rings have been overwhelmingly positive from both Navy and Marine Corps personnel.

Local commands may consider increasing the availability of free condoms, including condom key rings, as an important component of a comprehensive prevention strategy that supports STD/HIV and unplanned pregnancy prevention efforts. Additional information and support for sexual health issues is available from the SHARP Website at <http://www-nehc.med.navy.mil/hp>, or by contacting Mr. Bill Calvert, SHARP Program Manager at (757) 462-3390 (DSN 253).



## REFERENCES

- American Social Health Association (1998). Sexually Transmitted Diseases in America: How Many Cases and at What Cost? Available: <<http://www.kff.org/content/archive/1445>>
- Bray, R.M., Kroutil, L.A., Whelless, S.C., Marsden, M.E., Bailey, S.L., Fairbanks, J.A., & Harford, T.C. (1995) 1995 Department of Defense survey of health related behaviors among military personnel (RTI/6019-6). Research Triangle Park, NC: Research Triangle Institute.
- Bray, R.M., Sanchez, R.P., Ornstein, M.L., Lentine, D., Vincus, A.A., Baird, T.U., Walker, J.A., Whelless, S.C., Guess, L.L., Kroutil, L.A., & Iannacchione, V.G. (1999) 1998 Department of Defense survey of health related behaviors among military personnel (RTI/7034/006-FR). Research Triangle Park, NC: Research Triangle Institute.
- Brodine, S.K., Mascola, J.R., Weiss, P.J., Ito, S.I., Porter, K.R., Artenstein, A.W, Garland, F.C., McCutchan, F.E., Burke, D.S., (1995). Detection of diverse HIV-1 genetic subtypes in the USA. Lancet 346(8984) 1198-1199.
- Brown, A.E., Newby, J.H., Ray, K.L., Jackson, J.N., & Burke, D.S. (1996). Prevention and treatment of HIV infections in minorities in the US military: A review of military research. Military Medicine, 161(2); 123-127.
- Calvert, W. (1998). HIV seroconversion trends in USN and USMC for 1997. Naval Medical Surveillance Report, 1 (2), 15-17. Navy Environmental Health Center, Norfolk, VA.
- Centers for Disease Control and Prevention (1988). Perspectives in disease prevention and health promotion condoms for prevention of sexually transmitted diseases MMWR; 37(9);133-7.
- Centers for Disease Control and Prevention (1993). Update: Barrier protection against HIV infection and other sexually transmitted diseases. MMWR; 42(30):589-591, 597.
- Centers for Disease Control and Prevention (1999a). Primary and secondary syphilis – United States, 1998. MMWR; 48(39):873-878.
- Centers for Disease Control and Prevention (1999b). Statistical Projection/Trends, updated July 19, 1999. Available: <[http://www.cdc.gov/nchstp/hiv\\_aids/hivinfo/cdcfax.htm](http://www.cdc.gov/nchstp/hiv_aids/hivinfo/cdcfax.htm)>
- Center for Health Policy Studies (2000). Final Report. Tri-Service study of HIV education and prevention needs in the U.S. military, January 28, 2000. Center for Health Policy Studies, Columbia, MD.
- Cohen, D., Scribner, R., Bedimo, R., and Farley, T.A. (1999). Cost as a barrier to condom use: the evidence for condom subsidies in the United States. American Journal of Public Health, 89(4) 567-8.

- Cohen, M.S., Dallagetta, G., Laga, M., Holmes, K.L. (1994). A new deal in HIV prevention: lessons from the global approach. The New England Journal of Medicine 333(15), 1072-1078.
- Eng, T.T., & Butler, W.T. (Eds.). (1997). The hidden epidemic—confronting sexually transmitted diseases. National Academy Press, Washington, D.C.
- Garland, F.C., Gorham, E.D., Miller, M.R., Hickey, T.M., Balaza, L.L. (1990). Cross-sectional demographic characteristics of human immunodeficiency virus seropositive Navy and Marine Corps active-duty personnel (Report No. 90-3). Naval Health Research Center, San Diego, CA.
- Garland, F.C., Garland, C.F., Gorham, E.D., Miller, M.R., Cunnion, S.O., Berg, W.S., & Balazs, L.L., Navy HIV Working Group. (1991). Risk of human immunodeficiency virus (HIV) seroconversion in the US Navy personnel following visits to foreign ports. Naval Health Research Center Report No. 91-10. Naval Health Research Center, San Diego, CA.
- Garland, F.C., Garland, C.F., Gorham, E.D., Miller, M.R., Brodine, S.K., Fallon, A., & Balazs, L.L. (1993). Geographic variation in human immunodeficiency virus seroconversion rates in the US Navy. Journal of Acquired Immune Deficiency Syndromes 6(11), 1267-1274.
- Hawkins, R.E., Malone, J.D., Cloninger, L.A., Rozmajzl, P.J., Lewis, D., Butler J., Cross E., Gray, S., (1992). Risk of viral hepatitis among military personnel assigned to US Navy ships. Journal of Infectious Diseases 1992;165:716-9.
- Kalichman, S.C. (1998). Understanding AIDS: advances in research. American Psychological Association, Washington, D.C.
- Kirby D. (1994). Sexuality and HIV education programs in schools. In: Garrison, J., Smith, M.D., Besharov, D.D, eds. Sexuality and American social policy: a seminar series. Sex education in the schools. Menlo Park, CA; Henry J. Kaiser Family Foundation, 1994; 1-41.
- Malone, J.D., Hyams, C., Hawkins, R.E., Sharp, T.W., Danielle, F.D., (1993). Risk factors for sexually transmitted diseases among deployed U.S. military personnel. Sexually Transmitted Diseases, 20(5) 294-298.
- National Center for Health Statistics. (1999). Healthy People 2000 Review, 1998-99 (DHHS Publication No. 98-1256). Hyattsville, MD: Author.
- Navy Environmental Health Center. (1999a). Reported communicable diseases in active Navy and Marine Corps personnel: 10 year report, 1988-1997. (pp. 13-18). Navy Environmental Health Center, Norfolk, VA.
- Navy Environmental Health Center. (1999b). Military HIV Data 1994 – 1998. Available <<http://www-nehc.med.navy.mil/hp/index.htm>> Navy Environmental Health Center, Norfolk, VA.

- Navy Environmental Health Center. (1999c). U.S. Navy HIV instructor course. (Technical Manual NEHC – TM 6100.99-9 [September 1999] p22-26). Norfolk, VA: Author.
- Roper, W.L., Peterson, H.B., Curran, J.W. (1993). Commentary: Condoms and HIV/STD prevention—clarifying the message. American Journal of Public Health 83(4), 501-503.
- Schibly, B. (1998). Summary of common STDs report to NEPMU2. Naval Medical Surveillance Report, 1 (2), 5. Navy Environmental Health Center, Norfolk, VA.
- Sellers, D.E., McGras, S.A., McKinalay, J.B. (1994). Does the promotion and distribution of condoms increase teen sexual activity? Evidence from an HIV prevention program for Latino youth. Am J Public Health 1994;84:1952-8.
- STD Advisor (2001). CDC issues condom use guidance for HIV, HPV, and other STDs. STD Advisor 4(6):66-67. Flynn Publications, Decatur GA, June 2001.
- Thomas, P.J., & Uriell, S.A., (1998). Pregnancy and Single Parenthood in the Navy: Results of a 1997 Survey (TR-98-6). Navy Personnel Research and Development Center, San Diego, CA.
- UNAIDS (1998c). AIDS and the military: UNAIDS point of view, May 1998. . (p3-4). Joint United Nations Programme on HIV/AIDS. Available on-line at: <http://www.unaids.org/publications/documents/sectors/military/militarypve.pdf>
- Wolk, L.I., Rosenbaum, R. (1995). The benefits of school-based condom availability – cross-sectional analysis of a comprehensive high school-based program. J Adolesc Health 1995;17:184-8.
- World Health Organization (1996). Fact Sheet N 110, sexually transmitted diseases (STDs). Available: <<http://www.who.int/inf-fs/en/fact110.html>>